

Application/Control Number: 09/495,175
Art Unit: 2142

Docket No.: 2000-0025

REMARKS

Reconsideration and allowance are requested. Claims 25 - 53 are pending and claim 25 is amended.

Rejection of Claims 25 - 53 Under Section 103

The Examiner rejects claims 25 - 53 under Section 103 as being unpatentable over Suzan et al. MPEG-7 Standardization Activities ("Suzan et al.") in view of U.S. Patent No. 6,564,263 to Bergman et al. ("Bergman et al."). Applicants have traversed this rejection and have provided a number of arguments regarding why the Examiner is incorrectly interpreting the teachings of both the prior art and the claims. Applicants now amend claims 25 and provide further arguments regarding patentability. Applicants maintain that given the arguments set forth below regarding the lack of motivation to combine the references, that the amendment to claim 25 is not made for patentability but to further clarify the claim language.

Independent claim 25 recites a method for generating description records from multimedia content. The third step in the claim requires generating from the multimedia object descriptions, non-hierarchical entity relation graph descriptions for at least one of the multimedia types. Applicants note that Suzan et al. report on the current status of the development of the MPEG-7 standard. Suzan et al. set forth the details of the MPEG-7 protocol and the technical patterns necessary to comply with the protocol. In other words, Suzan et al. teach one of skill in the art about what must be done to comply with MPEG-7 as it existed at the time. They note on page 520 that "As it is apparent from above, MPEG-7 is still in its formation process. Discussions are still ongoing in an effort to determine the approach to the best possible standard." Under Section 3 of Suzan et al., they set forth "Requirements of MPEG-7" and list features for audio and visual requirements that must be complied with to match the standard. In this context, Suzan et al. notably would not suggest to one of skill in the art to seek technical features outside of the current proposed protocol

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requirements. The reason for this is that any such excursion would eliminate compliance with MPEG-7 as it then existed.

The Examiner in the Office Action dated January 23, 2004 relies on the "Feature hierarchy" section of Suzan et al. as matching disclosure for the entity relation graph descriptions of claim 25. The feature hierarchy section states: "*Feature hierarchy*: MPEG-7 shall support the hierarchical representation of different features in order that queries may be processed more efficiently in successive layers." (emphasis in original). Applicants previously explained that the present specification supported an interpretation of the entity relation graphs as non-hierarchical. Applicants have also argued that the Examiner improperly interpreted Suzan et al. and claim 25 to equate the reference with the claim limitations. The present amendment to claim 25 makes clear that the entity relation graphs are non-hierarchical. Therefore, Suzan et al. actually teach away from the present invention because they require a hierarchical representation and claim 25 recites a non-hierarchical entity relation graph.

With regards to whether one of skill in the art would read Suzan et al. and find any suggestion to use a hierarchical approach, Suzan et al. make clear that there are no exceptions to the hierarchical requirement. At the time of the Suzan et al. reference, the MPEG-7 standard was required to support the hierarchical representation of different features so that queries may be processed more efficiently. Therefore, Applicants submit that Suzan et al. actually teach away from the non-hierarchical approach recited in claim 25. For the foregoing reasons, Applicants submit that claim 25 is patentable over the combination of cited art.

Claims 26 - 52 each depend from claim 25 and recite further limitations therefrom. Each of these claims is allowable inasmuch as the parent claim is allowable.

In addition to the interpretation of the Suzan et al. reference and claim 25 issues above, Applicants submit that there is no reason or suggestion to combine Suzan et al. with

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Burgman et al. The requirements on the Examiner for establishing the *prima facie* case of obviousness are set forth in the June, 2004 Response.

The Examiner conceded that Suzan et al. does not teach the limitation of integrating the multimedia descriptions and the entity relation graph descriptions to generate a description record to represent content embedded within the multimedia content. Amended claim 25 expressly makes the entity relation graphs non-hierarchical. The Examiner then asserted that Bergman et al. provide this missing limitation and that it would be obvious to combine Suzan et al. with Bergman et al. because one of skill in the art would be motivated "to generate entity relation description based on the multimedia object descriptions for multiple multimedia content types including a composite multimedia object description that represents content embedded within the multimedia content, as taught by Bergman."

Applicants submit that there is no suggestion or motivation to combine Bergmann et al. with Suzan et al. for several reasons. First, Bergman et al. was filed as a provisional in December, 1998. Suzan et al. was published October 1998 as a conference proceeding reporting on the then-current proposal for MPEG-7. The purpose of Bergman et al. was to introduce a multimedia content description framework that differed from the MPEG-7 submissions. In this regard, Bergman et al. state:

In one multimedia application relating to the Motion Picture Experts Group (MPEG) data compression standard, for example, a main difference between the InfoPyramid approach of the present invention and other conventional schemes proposed for MPEG-7, is the virtually complete elimination of the dichotomy between data and metadata. Col. 90, lines 39 - 44.

As can be seen from this paragraph, Applicants submit that Bergman et al. clearly distance their InfoPyramid approach from the current proposals for MPEG-7. The dates of the Bergman et al. application and the Suzan et al. reference are instructive in that they are almost exactly concurrent in time. Note further that Suzan et al. is based on proposals for MPEG-7 standard submitted in March, 1998. Given the timing of these prior art documents,

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the current proposals for MPEG-7 referenced by German et al. may be represented by the MPEG-7 summary in Suzan et al.

Therefore, given the fact that Bergman et al. explicitly states that their invention differs from the conventional MPEG-7 approach, Applicants submit that Bergman et al. actually teach away from any combination with Suzan et al.'s articulation of the current state of MPEG-7. Appellants respectfully submit that Bergman et al. would certainly not suggest to one of skill in the art to blend their teachings with Suzan et al., which sets forth MPEG-7 as it then existed. This fact is further bolstered by the well-known experience in developing standards where various contributors strive to have their proposed technology adopted into the standard. In this regard, Bergman et al. desired that their InfoPyramid content description framework would be adopted over the then-current MPEG-7 proposal. Therefore, one of skill in the art would not be motivated to combine or blend these divergent suggestions for adoption into a single standard.

The obviousness analysis requires one to place him/herself into the time frame of when the "invention was made" 35 U.S.C. Section 103(a). The Examiner must determine, at the time the invention was made, whether it would be obvious to one of skill in the art to combine the references. The present application was filed February 2000. At this time, the MPEG-7 standard had not yet been finalized. (See MPEG-7 schedule on page 517, Suzan et al.). Therefore, one of skill in the art would know that the standards body would still be considering a working draft of MPEG-7 in February 2000. This information is provided to give the Examiner the context of what a person of skill in the art would understand Bergman et al.'s statement about being different from MPEG-7 proposals to mean in February 2000.

For these reasons, Applicants respectfully submit that one of skill in the art would not have found motivation to modify Suzan et al. with Bergman et al. or to blend the teachings of these two references.

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Even if Suzan et al. were combined with Bergman et al., Applicants submit that the combination still fails to teach each element of claim 25. First, Applicants submit that Bergman et al. clearly do teach a hierarchical approach with their InfoPyramid 302 and associated disclosure. FIG. 4 and FIG. 9 of Bergman et al. show the pyramid and how the relationship between elements in the pyramid can only be described as hierarchical. For example, within the pyramid, there is a highest level of fidelity or resolution along the base of the pyramid and the lowest level of fidelity or resolution along the top of the pyramid. Varying parameter degrees are in between. Col. 7, lines 14 - 25. Therefore, Bergman et al. teach that the pyramid organizes data according to a hierarchy of highest values to lowest values within the pyramid. While the InfoPyramid of Bergman et al. differs from the feature hierarchy mentioned in Suzan et al., both these approaches do have a hierarchical component. Therefore, even if they were combined, Suzan et al. and Bergman et al. fail to teach a non-hierarchical entity graph as is recited in claim 25.

A further reason that prevents one of skill in the art from having motivation to combine Suzan et al. with Bergman et al. also relates to the fact that Suzan et al. is a summary of the then-current status of MPEG-7. The Examiner states that it would be obvious to include Bergman et al.'s teachings regarding aggregating, incorporating or combining the multimedia object descriptions and their entity graph relationship graph descriptions to generate the description record to represent content embedded within the multimedia content. A problem with this reasoning is that it requires one of skill in the art to incorporate Bergman et al.'s scheme into Suzan et al., which would then render the teachings of Suzan et al. outside the MPEG-7 proposed protocol. For example, the "description record" in Suzan et al. is described on page 518 in the following paragraph: "*Description: A description is the entity describing the data and consisting of a DS[Description Scheme] and instantiation of the corresponding descriptors.*" The DS and descriptors are also set forth on page 518.

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If Bergman et al.'s approach to creating a content description framework were employed, it would differ dramatically from the then-current MPEG-7 approach of Suzan et al. As mentioned above, Bergman et al. specifically state that their approach is different from MPEG-7. Therefore, if Bergman et al. teach what the Examiner asserts that they teach, then their integrated description record that represents content embedded within multimedia content clearly differs from the then-current MPEG-7 as set forth in Suzan et al. For this reason, one of skill in the art would not find motivation to go outside the MPEG-7 protocol, and change the requirements of the protocol with subject matter from Bergman et al. As set forth in the MPEP, if the blending of two references requires a change in the principle of operation of a reference, then there can be no motivation to combine.

Therefore, Applicants submit that claim 25 is patentable and in condition for allowance. Furthermore, claims 26 - 52 each depend from claim 25 and recite further limitations therefrom. Accordingly, Applicants submit that these claims are patentable as well.

The Examiner also combined Suzan et al. with Bergman et al. to reject claim 53. Given the explanation above, Applicant submit that claim 53 is patentable since there is no reason to combine the references.


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CONCLUSION

In view of the above, Applicants submit that all claims are patentable over the prior art of record and respectfully request that the Examiner's rejections of these claims be withdrawn.

Respectfully submitted,

By: 

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